

## WEAR AND TEAR,

OR

## INTS FOR THE OVERWORKED.

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PHILADELPHIA:

J. B. LIPPINCOTT & CO.
1871.

produce an effect which would not in some other countries be so severe. I am quite persuaded, indeed, that the development of a nervous temperament, with lessened power of endurance, is one of the many race-changes which are also giving us facial, vocal, and other peculiarities derived from none of our ancestral stocks. If, as I believe, this change of temperament in a people coming largely from the phlegmatic races is to be seen most remarkably in the more nervous sex, it will not surprise us that it should be fostered by many causes which are fully within our own control. Given such a tendency, disease will find in it a ready prey, want of exercise will fatally increase it, and all the follies of fashion will aid in the work of ruin.

While a part of the mischief lies with climatic conditions which are utterly mysterious, the obstacles to physical exercise, arising from extremes of temperature, constitute at least one obvious cause of ill health among women in our country. The great heat of summer, and the slush and ice of winter, interfere with women who wish to take exercise, but whose arrangements to go out-of-

doors involve wonderful changes of dress and an amount of preparation appalling to the masculine creature.

Worst of all, however, to my mind—most destructive in every way—is the American view of female education. The time taken for the more serious instruction of girls extends to the age of eighteen, and rarely over this. During these years they are undergoing such organic development as renders them remarkably sensitive. At seventeen I presume that healthy girls are nearly as well able to study, with proper precautions, as men; but before this time over-use, or even a very steady use, of the brain is dangerous to health and to every probability of future womanly usefulness.

In most of our schools the hours are too many, for both girls and boys. From a quarter of nine or nine until half-past two is, with us, the common school-time in private seminaries. The usual recess is twenty minutes or half an hour, and it is not filled by enforced exercise. In certain schools—would it were the rule!—ten minutes recess is given after every hour; and in the Blind Asylum this time is taken up by light

gymnastics, which are obligatory. To these hours we must add the time spent in study out of school. This, for some reason, nearly always exceeds the time stated by teachers to be necessary; and most girls between the ages of thirteen and seventeen thus expend two or three hours. Does any physician believe that it is good for a growing girl to be so occupied seven or eight hours a day? or that it is right for her to use her brains as long a time as the mechanic employs his muscles? But this is only a part of the evil. The multiplicity of studies, the number of teachers,—each eager to get the most he can out of his pupil,—the severer drill of our day, and the greater intensity of application demanded, produce effects on the growing brain which, in a vast number of cases, can be only disastrous.

Even in girls of from fourteen to eighteen, such as crowd the Normal School in Philadelphia, this sort of tension and this variety of study occasion an amount of ill health which is sadly familiar to many physicians. The girls may themselves have no easy escape, as they are in training to teach for a living; but surely it were

possible and reasonable to lessen the useless load they have now to carry. Not to be unfair, let us take Section A, the highest class. It has eighteen branches and twenty-two studies every week, and once in two weeks Composition is added, making twenty-three in all, and this is what the scholars learn: Local Geography, Physical Geography, Grammar, Rhetoric, Arithmetic, Algebra, Constitution of the United States, Elocution, Etymology, Ancient History, Modern History, Penmanship, Drawing, Mensuration, Geometry, Philosophy, Chemistry, Theory and Practice of Teaching. The last three are taught by lectures. There are five recitations a day, but only about three daily studies requiring home preparation; which, says the Controllers' Report, ought not to occupy more than two hours,\* but, in a vast number of instances, do really demand very much more than this. Supposing no outside work to be needed for the lectures, we have still eighteen branches to be worked at in five days. The sole relief to this sad catalogue is

<sup>\*</sup> Report of Controllers, 1868.

the statement that the pupils are trained in Physical Exercises.

In private schools the same kind of thing goes on, with the addition of foreign languages, and under the dull spur of discipline, without the aid of any such necessities as stimulate the pupils of what we are pleased to call a normal (!) school.

In New England, where the forcing system is at its wicked worst for both sexes, the evil is beginning to attract attention, as in the case of the Boys' Latin School at Boston, which has no Saturday holiday, and seems to be admirably arranged to destroy health. In the Controllers' Report, whence I cull my facts as to the Normal School of Philadelphia, there is quoted from a New England report a significant passage — whether it applies to girls or boys we do not learn. The health of school children, say the Controllers, in their report, dated 1869, has attracted the attention of the Massachusetts Board of Education, and their last report contains important statistics as to the exhausting effects of over-exertion of the brain: "In one school of eighty-five pupils, only fifty-four had refreshing sleep; fifty-nine had headaches or constant weariness, and only fifteen were perfectly well." They next tell us that the best medical opinions state that men should not use the brain daily more than six hours, nor children more than three: "But in the above school thirty-one studied three and one-half hours, thirty-five studied four hours, and twelve from four to seven hours, in addition to the six hours of school." The report adds that, "in places where scholars are highest in reputation, the above example is the common experience."

In a somewhat discursive fashion I have pointed out the mischief which is pressing to-day upon our girls of every class in life. The doctor knows how often and how earnestly he is called upon to remonstrate against this growing evil. He is, of course, well enough aware that many sturdy girls stand the strain, but he knows also that very many do not—and that the brain, sick with multiplied studies never thoroughly mastered, plods on, doing poor work, until somebody wonders what is the matter with that girl; and so she scrambles through, or else breaks down with weak eyes, headaches, neuralgias, or what not.

I am perfectly confident that I shall be told here that girls ought to be able to study hard between fourteen and eighteen years without injury, if boys can do it. Practically, however, the boys of to-day are getting their toughest education later and later in life, while girls leave school at the same age as they did thirty years ago. It used to be common for boys to enter college at fourteen: at present, eighteen is a usual age of admission at Harvard or Yale. Now, let any one compare the scale of studies for both sexes employed half a century ago with that of today. He will find that its demands are vastly more exacting than they were—a difference fraught with no evil for men, who attack the graver studies later in life, but most perilous for girls, who are still expected to leave school at eighteen or earlier.\*

I firmly believe—and I am not alone in this opinion—that as concerns the physical future of women they would do far better if the brain were

<sup>\*</sup> Witness Richardson's heroine, who was "perfect mistress of the four rules of arithmetic!"

very lightly tasked and the school-hours but three or four a day until they reach the age of seventeen at least. Anything, indeed, were better than loss of health; and if it be in any case a question of doubt, the school should be unhesitatingly abandoned or its hours lessened, as the source of very many of the nervous maladies with which our women are troubled. I am almost ashamed to defend a position which is held by many competent physicians, but an intelligent friend, who has read this page, still asks me why it is that overwork of brain should be so serious an evil to women at the age of womanly development. My · best reply would be the experience and opinions of those of us who are called upon to see how many school-girls are suffering in health from confinement, want of exercise at the time of day when they most incline to it, bad ventilation,\* and too

<sup>\*</sup> In the city where this is written there is, so far as I know, not one private girls' school in a building planned for a schoolhouse. As a consequence, we hear endless complaints from young ladies of overheated or chilly rooms. If the teacher be old, the room is kept too warm; or if she be young, and much afoot about her school, the apartment is apt to be cold.

steady occupation of mind. At no other time of life is the nervous system so sensitive—so irritable, I might say—and at no other are abundant fresh air and exercise so all-important. To show more precisely how the growing girl is injured by the causes just mentioned would carry me upon subjects unfit for full discussion in these pages, but no thoughtful reader can be much at a loss as to my meaning.

These, then, are a few of the reasons why it were better not to educate girls at all between the ages of fourteen and eighteen, unless it can be done with careful reference to their bodily health. To-day, the American woman is, to speak plainly, physically unfit for her duties as woman, and is perhaps of all civilized females the least qualified to undertake those weightier tasks which tax so heavily the nervous system of man. She is not fairly up to what nature asks from her as wife and mother. How will she sustain herself under the pressure of those yet more exacting duties which nowadays she is eager to share with the man?

While making these stringent criticisms, I am

anxious not to be misunderstood. The point which above all others I wish to make is this, that owing chiefly to peculiarities of climate, our growing girls are endowed with organizations so highly sensitive and impressionable that we expose them to needless dangers when we attempt to overtax them mentally. In any country the effects of such a course must be evil, but in America, I believe it to be most disastrous.

As I have summoned up climate in the broad sense to account for some peculiarities of the health of our women, so also would I admit it as one of the chief reasons why work among men results so frequently in tear as well as wear. I believe that something in our country makes intellectual work of all kinds harder to do than it is in Europe; and since we do it with a terrible energy, the result shows in wear very soon, and almost always in the way of tear also. Perhaps few persons who look for evidence of this fact at our national career alone will be willing to admit my proposition, but among the higher intellectual workers, such as astronomers, physicists and naturalists, I have frequently heard this belief